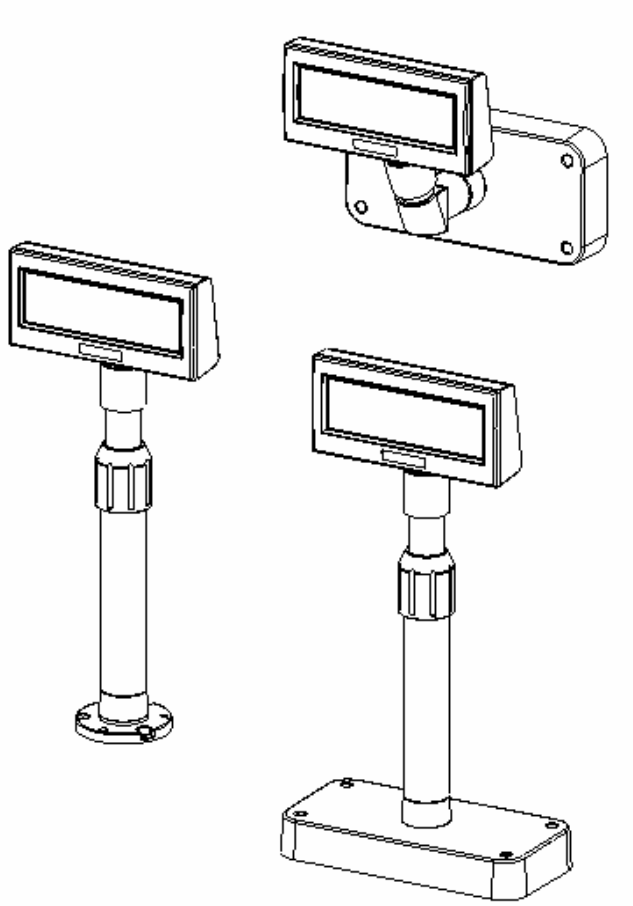
BIXOLON®

User's Manual

BCD-1100 Series

Customer Display

Rev. 1.00



http://www.bixolon.com

■ Safety Precautions

In using the present appliance, please keep the following safety regulations in order to prevent any hazard or material damage.

WARNING & CAUTION

Violating following instructions can cause serious injury or death.
Violating following instructions can cause slight wound or damage the appliance.

If you observe a strange smoke, odor or noise from the Display, unplug it before taking following measures.

□ Switch off the Display and unplug the set.
• After the disappearance of the smoke, call your dealer to repair it.

Keep the desiccant out of children's reach.

□ If not, they may eat it.

Install the product on the stable surface.

• If the Display falls down, it can be broken and you can hurt yourself.

Use only approved accessories and do not try to disassemble, repair or remodel it for yourself.

□ Call your dealer when you need these services.

Do not let water or other foreign objects in the Display.

• If this happened, switch off and unplug the Display before calling your dealer.

Keep the plastic bag out of children's reach.

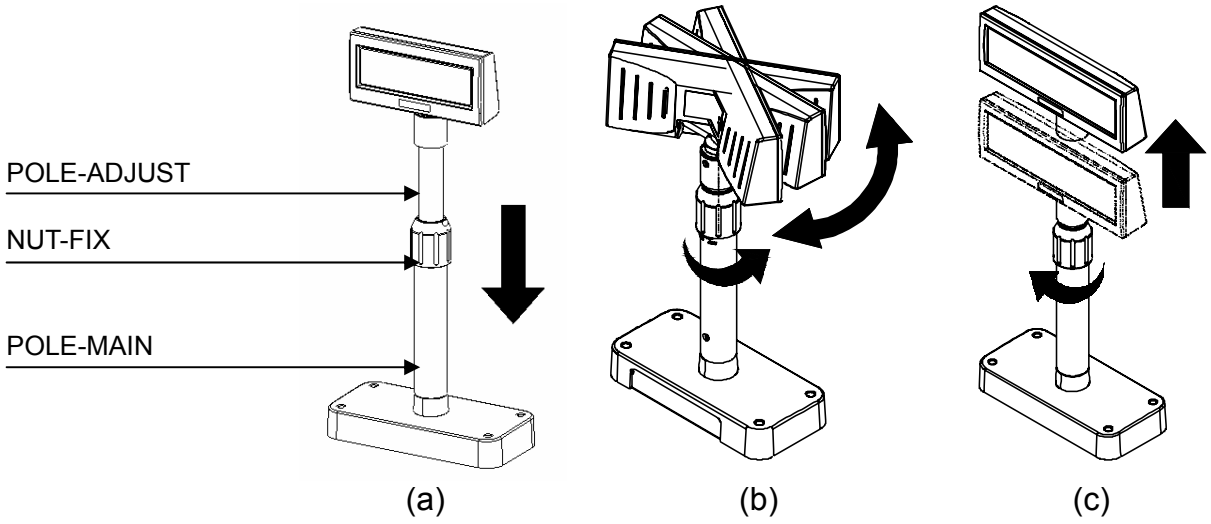
□ If not, a child may put the bag on his head.

5. Function

5-1 Rotation

This product allows display rotation to any position or angle desired by the user.
Please adhere to the following instructions during installation to prevent possible product damage and/or malfunction.

Following assembly, follow the sequence below to fix the DISPLAY in the desired position.



(a) Lower the DISPLAY UNIT in the direction of the arrow.
Rotate the NUT-FIX to allow for lowering.
(Please refer to the product OPEN/CLOSE label.)

(b) Rotate the DISPLAY UNIT to the desired angle.

Do not rotate the DISPLAY UNIT in any direction for more that one full revolution. (Beware as the DISPLAY UNIT can be rotated continuously.)

(C) After setting the DISPLAY to the desired position, secure the NUT-FIX. (When raising the DISPLAY UNIT, lateral movement is prevented.) Make sure to tighten the NUT-FIX after raising the DISPLAY UNIT to the desired height.

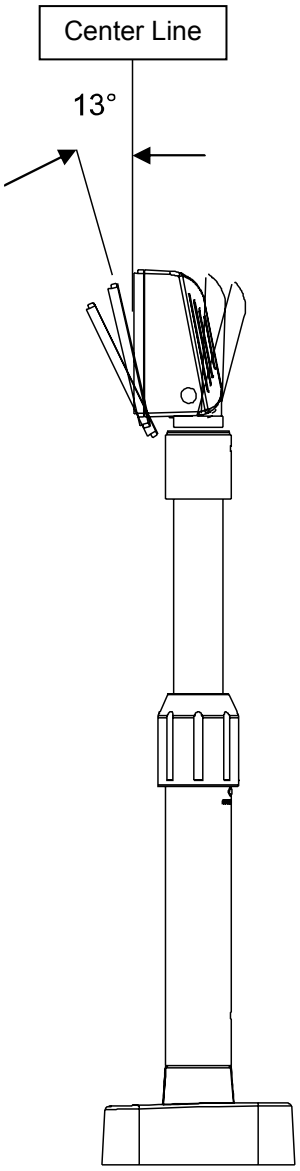
As excessive tightening of the NUT-FIX can result in product damage and/or malfunction, secure only to the extent that the DISPLAY UNIT is fixed and does not move.

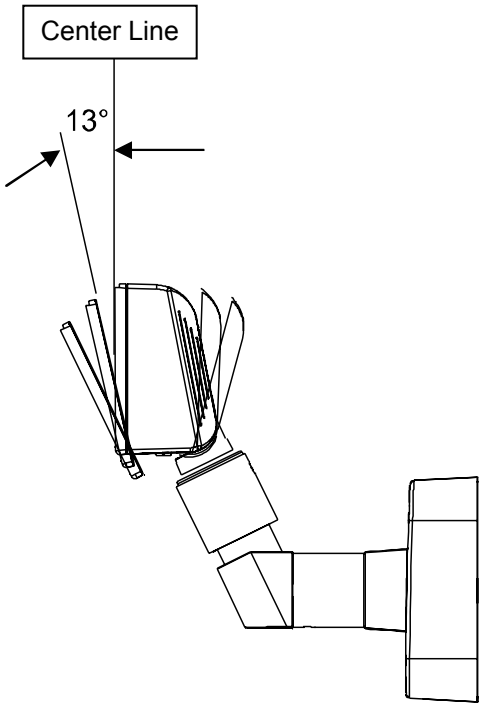
As shown in figure (A), make sure to fully lower the DISPLAY UNIT before rotating. Rotation of the DISPLAY UNIT when it is not fully lowered will produce a clicking sound. This sound does not indicate any product breakage and is a result of the friction between the POLE-MAIN RIB and the rotation section within the POLE-ADJUST.

5-2 Angling

This product allows display tilting to any angle desired by the user. Please adhere to the following instructions during installation to prevent possible product damage and/or malfunction.

TILT ANGLE : The display can be angled left and right from the Center Line in 13° angle intervals for a total of 4 steps, 5 positions. (Angling: 52°max.)





6. Switches

6-1 Display Switch

6-1-1 Feature : A Display Switch is located on the bottom of the display panel.
6-1-2 Function : Turns the power supply on/off.

6-2 DIP switches

6-2-1 Feature : Two DIP switches are located on the back of the display panel.
You can remove the DIP switch cover by pushing the hook.
6-2-2 Function: DIP switch settings can be read only when the power is on.
Therefore, any changes to the settings when the power is on do not take effect.

6-2-3 DIP S/W #1 Function (RS-232 Serial Input Setting)

No.	Function	Switch OFF	Switch ON
1	Default Setting	DIP Switch Values	EEP-ROM Data Leading
2	Reserved	-	-
3	Display Viewing Side	Customer Side	Operator Side
4	Self-test Execution	Does not execute	Executes
5~8	Emulation	(see table below)	

5	6	7	8	Emulation	5	6	7	8	Emulation
0	0	0	0	Samsung VFD	1	0	0	0	NCR Real POS
0	0	0	1	Epson ESC/POS	1	0	0	1	PD6000
0	0	1	0	ADM787/788	1	0	1	0	ICD2002
0	0	1	1	DSP800	1	0	1	1	Reserved
0	1	0	0	AEDEX	1	1	0	0	Reserved
0	1	0	1	UTC Standard	1	1	0	1	Reserved
0	1	1	0	UTC Enhance	1	1	1	0	Reserved
0	1	1	1	CD5220	1	1	1	1	Reserved

("0" : S/W OFF, "1" : S/W ON)

6-2-4 DIP S/W #2 Function (Command Emulation Mode and Self Test Setting)

No.	Function	Switch OFF	Switch ON
1	Data Length	8 bits	7 bits
2	Parity using	Non parity	Parity
3	Parity Selection	Odd	Even
4~6	Transmit Speed	(see table below)	
7~8	Reserved	-	-

4	5	6	Transmit Speed	4	5	6	Transmit Speed
0	0	0	9,600 bps	1	0	0	115,200 bps
0	0	0	4,800 bps	1	0	1	57,600 bps
0	1	1	2,400 bps	1	1	0	38,400 bps
0	1	0	1,200 bps	1	1	1	19,200 bps

("0" : S/W OFF, "1" : S/W ON)

6-3 Memory Switches

The following settings other than the DIP switch can be changed by software. These settings become effective after the power is turned on or initialization is executed by a command.

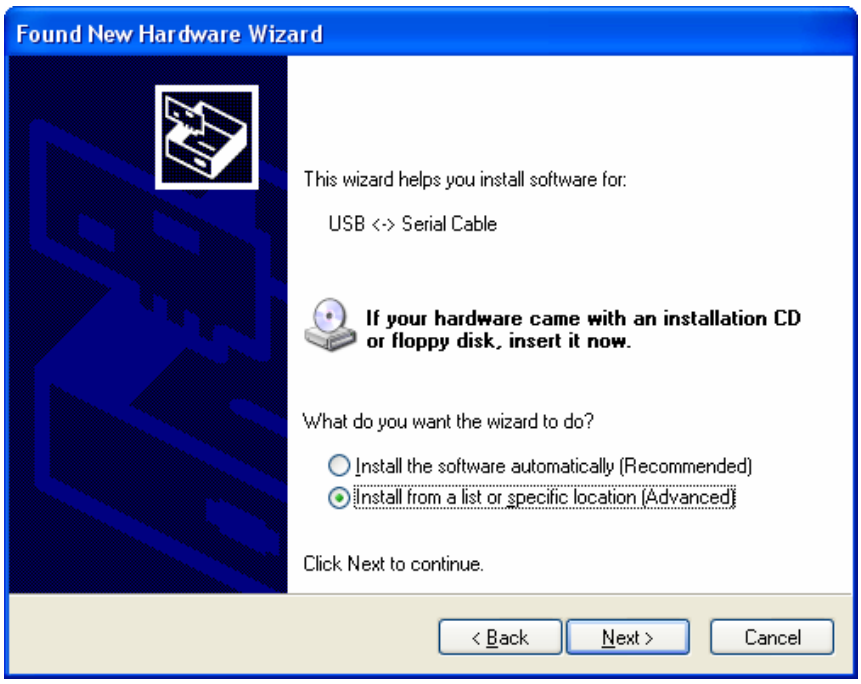
No.	Function	Default	Content to be set	Range to be set
Msw 10	Character code table section	n=0	Page 0 is selected	0-5, 16-19, 254, 255
Msw 11	International character set selection	n=0	U.S.A is selected	0-13
Msw 12	Brightness adjustment	n=4	100%	1-4
Msw 13	Selection of the peripheral devices	n=2	Display is selected	1-3
Msw 14	Cursor display	Selected	Selected	0, 1, 48, 49

7. USB Virtual COM Installation

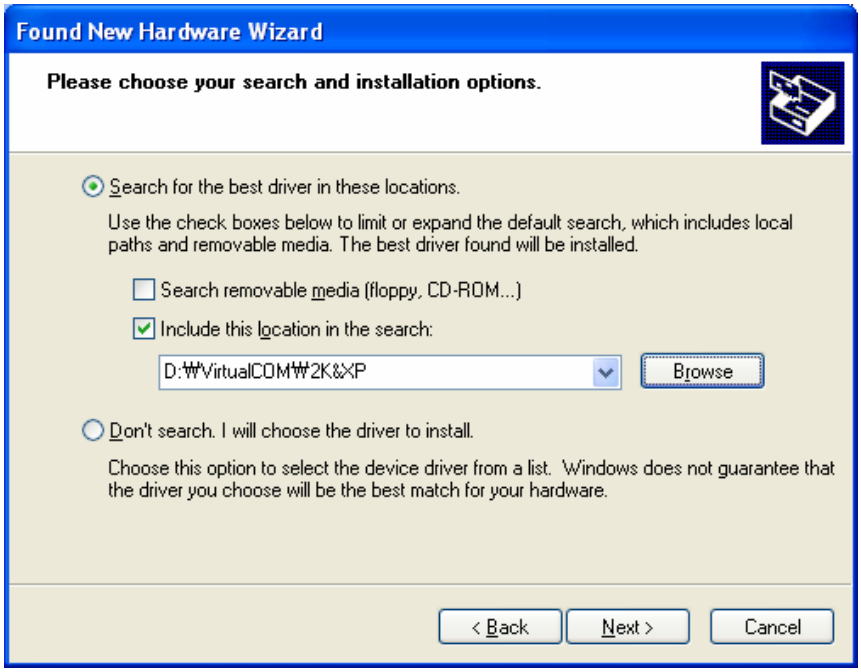
PC requires software installation when it detects new hardware connected to USB Port. First, connect BDC-1100DU/WU (USB) to PC USB Port and install software and set the conditions as below.

1) Connect BDC-1100DU/WU (USB) to PC USB Port. Message will pop up Found New Hardware.

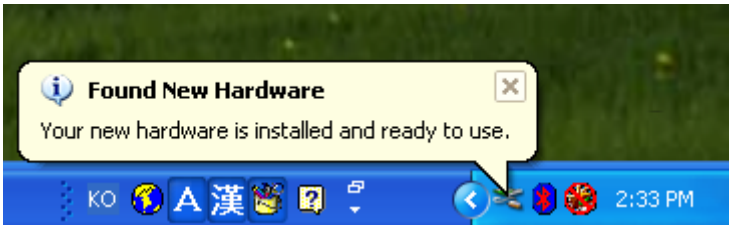
2) Select Install from a list or specific location (Advanced).


Found New Hardware Wizard
This wizard helps you install software for:
USB <-> Serial Cable
If your hardware came with an installation CD or floppy disk, insert it now.
What do you want the wizard to do?
Install the software automatically (Recommended)
Install from a list or specific location (Advanced)
Click Next to continue.
< Back
Next >
Cancel

3) Select the location VirtualCOM₩2K&XP by Browse and select Next.

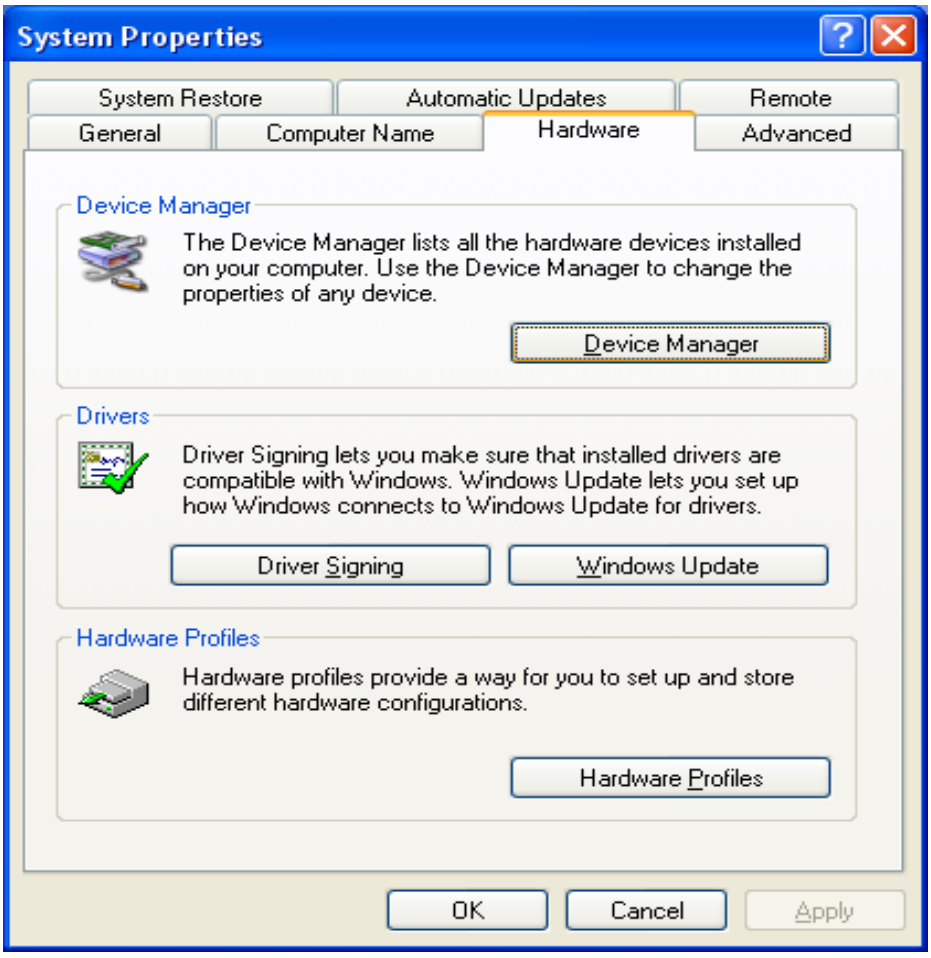

Found New Hardware Wizard
Please choose your search and installation options.
Search for the best driver in these locations.
Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.
Search removable media (floppy, CD-ROM...)
Include this location in the search:
D:₩VirtualCOM₩2K&XP
Browse
Don't search. I will choose the driver to install.
Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.
< Back
Next >
Cancel

4) Message pops up again at right bottom of PC Found New Hardware (USB Serial Port) when it completes.

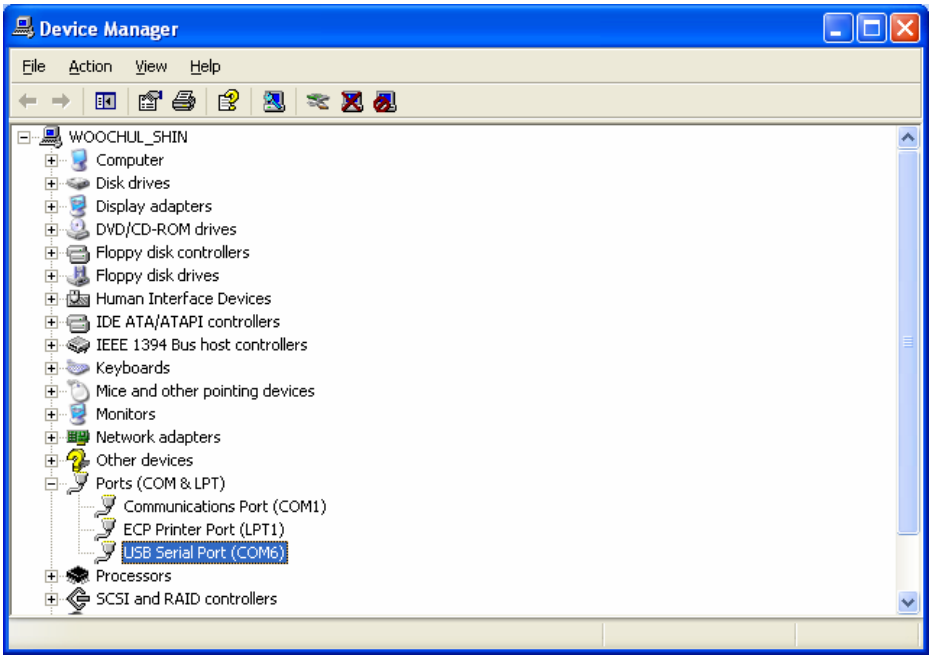


5) Repeat step 1) thru 3) again at Found New Hardware Wizard. It installs twice.

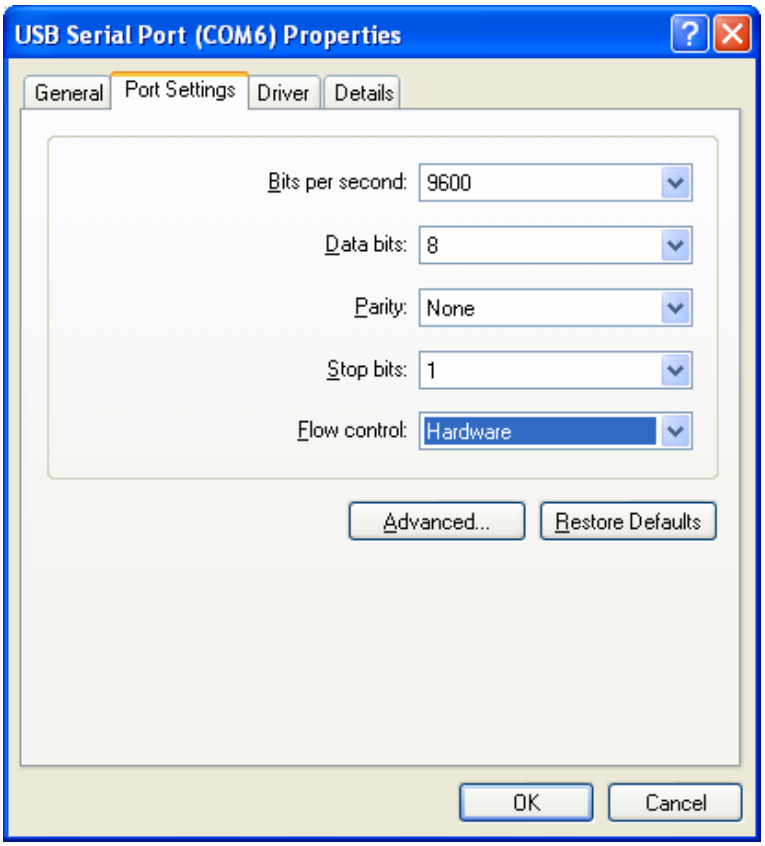
6) Open Device Manager (Start > Control Panel > System > Hardware > Device Manager)


System Properties
System Restore
Automatic Updates
Remote
General
Computer Name
Hardware
Advanced
Device Manager
The Device Manager lists all the hardware devices installed on your computer. Use the Device Manager to change the properties of any device.
Device Manager
Drivers
Driver Signing lets you make sure that installed drivers are compatible with Windows. Windows Update lets you set up how Windows connects to Windows Update for drivers.
Driver Signing
Windows Update
Hardware Profiles
Hardware profiles provide a way for you to set up and store different hardware configurations.
Hardware Profiles
OK
Cancel
Apply

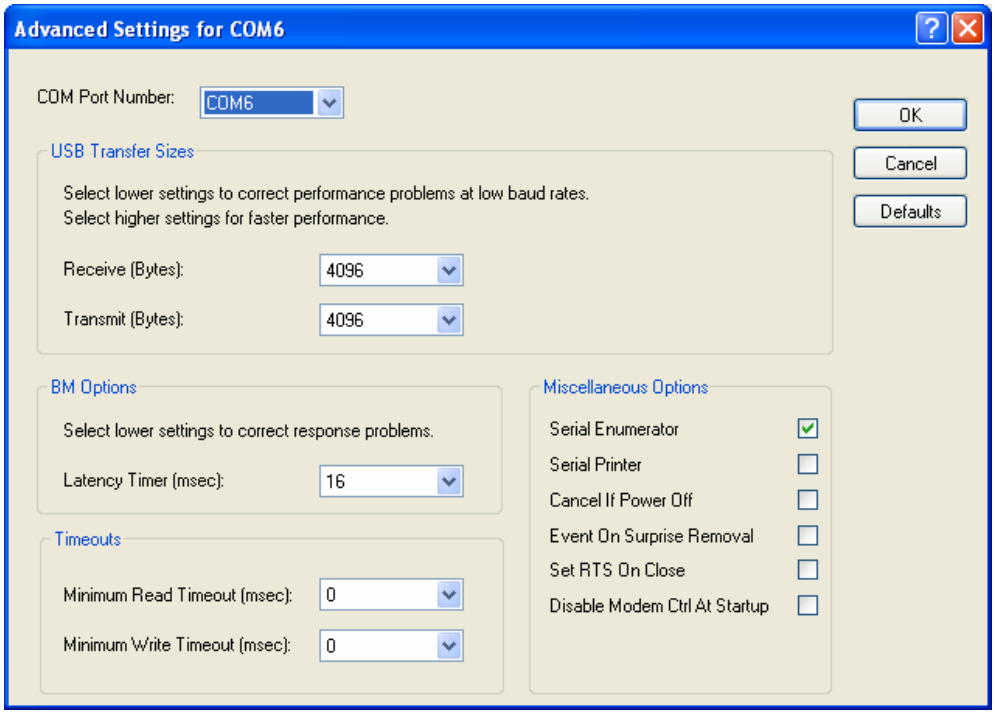
7) Select USB Serial Port(COM x) and click on the right button of mouse. Then select Properties. COM port is automatically numbered and it varies from PC port occupation conditions.



8) Set Serial communication conditions and select Advanced.
Preset Serial conditions are 9600 bps, 8 data bit, none parity, hardware flow control. They must be the same with Master setting and application program Serial setting.



9) Check in the boxes of Serial Enumerator and Serial printer. Then select OK. Now Virtual COM driver has been installed Successfully.
(Windows 98 does not have the boxes of Serial enumerator and Serial printer)



8. Appendix

8-1 Specifications

Item		Description
Display	Display Method	VFD
	Brightness	800~1000 [cd/㎡]
	Character Size	5 x 7 [dot]
	Number of Columns	20 character, 2 line
	Operating Temperature	0~70 ℃
	Operating Humidity	20~85 %
Reliability	VFD	20,000 [hour]

8-2 Certification

1) EMC & Safety Standards

- Europe: CE EMC, TUV GS: EN60950-1: 2001
- North America: FCC Part 15 Subpart B
- Safety Standards: CB-scheme: IEC60950-1: 2001

WARNING

Use of an unprotected interface cable with this device conflicts with EMC standards. Users should only use cables approved by BIXOLON.

2) CE Mark

• EMC Directive 89/336/EEC	EN 55022:1994 +A1:1995 +A2:1997 EN 61000-3-2:2000 EN 61000-3-3:1995 +A1:2001 EN 55024:1998 +A1:2001 EN 61000-4-2:1995 +A1:1998 +A2:2001 EN 61000-4-3:1996 +A1:1998 +A2:2001 EN 61000-4-4:2004 EN 61000-4-5:1995 +A1:2001 EN 61000-4-6:1996 +A1:2001 EN 61000-4-11:1994 +A1:2001
• Radio Spectrum	EN300328 v1.6.1
• Low Voltage Directive 73/23/EEC	Safety: EN60950-1:2001

3) WEEE (Waste Electrical and Electric Equipment)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

8-3 Label Types

The label types used with this printer is as follows.

- BIXOLON Logo Labels: PET
- Rating Labels: PP
- Other Labels: PET